

**System for Protecting Semiconductor Circuits  
from Electrostatic Discharges**

**Claims**

1. Protective diode system for protecting semiconductor circuits from electrostatic discharges, comprising at least one planar diode having two electrodes which are respectively contacted by a plurality of contacts, and the contacts are connected by means of metallic planes to the operating voltage, to a pad, or to ground, **characterized in that** the planar diode comprises a first insular electrode (5) enclosed by a second electrode (4), and the contacts (6) of the first electrode (5) are contacted by a first metallic plane (7), and the contacts (6) of the second electrode (4) are contacted by a superposed second metallic plane (8).
2. System according to Claim 1, **characterized in that** multiple planar diodes are situated adjacent to one another.
3. System according to Claim 1, **characterized in that** multiple planar diodes are situated in an array.
4. System according to Claim 2 and 3, **characterized in that** the planar diodes are interconnected to form a functional unit.
5. System according to Claim 1, **characterized in that** the plurality of contacts (6) is replaced by a single contact.
6. System according to Claim 1, **characterized in that** the insular electrode (5) has an n-angular shape.

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AMENDED CLAIMS

**Claims:**

1. System for protecting semiconductor circuits from electrostatic discharges, comprising a planar diode having two electrodes which are respectively contacted by a plurality of contacts, and the contacts are connected by means of metallic planes to the operating voltage, to a pad, or to ground, **characterized in that** a plurality of planar diodes is provided in a common first electrode (4), each planar diode having a second insular electrode (5) surrounded by the first electrode (4), and the contacts (6) of the electrode are (5) contacted by a first metallic plane (7) and the contacts (6) of the electrode (4) are contacted by a superposed second metallic plane (8).
2. System according to Claim 1, **characterized in that** multiple planar diodes are situated adjacent to one another.
3. System according to Claim 1, **characterized in that** multiple planar diodes are situated in an array.
4. System according to Claim 2 and 3, **characterized in that** the planar diodes are interconnected to form a functional unit.
5. System according to Claim 1, **characterized in that** the insular electrode (5) has a circular or polygonal shape.